STATE OF CONNECTICUT





FACT SHEET: Foodborne Illness— What Consumers Should Know

What Is Foodborne Illness?

Foodborne illness often presents itself as flu-like symptoms such as nausea, vomiting, diarrhea, or fever. It may not be realized that bacteria or other pathogens in food cause the illness. There are thousands of types of bacteria naturally present in our environment. Not all bacteria cause disease in humans. For example, some bacteria are used in making cheese and yogurt.

Bacteria that cause disease are called pathogens. When certain pathogens enter the food supply, they can cause foodborne illness. Millions of cases of foodborne illness occur each year. Most can be prevented through the proper handling, cooking or processing of food. Age and physical condition place some persons at higher risk than others for foodborne illness. Very young children, pregnant women, the elderly and those with compromised immune systems are those most "at risk" from any pathogen.

How Bacteria Get in Food

Bacteria may be on products when you buy them. Raw or uncooked meats, poultry, seafood, and eggs are not sterile. Neither is fresh produce such as lettuce, tomatoes, and melons. Even precooked, ready-to-eat foods can become contaminated with bacteria transferred from raw products, meat juices or other contaminated items, or from food handlers with poor personal hygiene.

The "Danger Zone"

Bacteria multiply rapidly between 40°F and 140°F. To keep food out of this "danger zone," keep cold foods cold and hot foods hot.

- Store food in the refrigerator (40°F or below) or freezer (0°F or below).
- Cook foods to 165°F (145°F for roasts, steaks, and chops of beef, veal, and lamb).
- Maintain hot cooked food at 140°F or above.
- When reheating cooked food, reheat to 165°F.

In Case of Suspected Foodborne Illness

Seek treatment as necessary. If the victim is in an "at risk" group, seek medical care immediately, or if symptoms persist or are severe (such as bloody diarrhea, excessive nausea and vomiting, or high temperature).

Preserve the evidence. If a portion of the suspect food is available, wrap it securely, mark the wrapper with "DANGER" and refrigerate it. Save the packaging materials, such as cans or cartons. Write down the food type, the date, and other identifying marks on the package, the time consumed, and when the onset of symptoms occurred. Save any identical unopened products.

Call your local health department if the suspect food was served at a large gathering, from a restaurant or other food service facility, or if it is a commercial product.

Foodborne Bacteria of Concern

Campylobacter jejuni: Found in intestinal tracts of animals and birds, raw milk, untreated water, and sewage sludge. *Transmission:* Contaminated water, raw milk, and raw or undercooked meat, poultry, or shellfish. *Symptoms:* Fever, headache and muscle pain followed by diarrhea (sometimes

bloody), abdominal pain, and nausea that appear 2 to 5 days after eating; may last 7 to 10 days.

Clostridium botulinum: Widely distributed in nature; soil, water, on plants, and intestinal tracts of animals and fish. Grows only in little or no oxygen. *Transmission:* Bacteria produce a toxin that causes illness. Improperly canned foods, garlic in oil, vacuum-packed and tightly wrapped food. *Symptoms:* Toxin affects the nervous system. Symptoms usually appear 18 to 36 hours, but can sometimes appear in as few as 4 hours or as many as 8 days after eating; double vision, droopy eyelids, trouble speaking and swallowing, and difficulty breathing. Fatal in 3 to 10 days if not treated.

Clostridium perfringens: Found in soil, dust, sewage, and intestinal tracts of animals and humans. Grows only in little or no oxygen. *Transmission:* Called "the cafeteria germ" because many outbreaks result from food left for long periods in steam tables or at room temperature. The bacteria is destroyed by cooking, but some toxin-producing spores may survive. *Symptoms:* Diarrhea and gas pains may appear 8 to 24 hours after eating; usually last about 1 day, but less severe Symptoms may persist for 1 to 2 weeks.

Escherichia coli O157:H7: Found in intestinal tracts of some mammals, raw milk, un-chlorinated water; one of several strains of E. coli than can cause human illness. *Transmission:* Contaminated water, raw milk, raw or rare ground beef, unpasteurized apple juice or cider, uncooked fruits and vegetables; person-to-person. *Symptoms:* Diarrhea or bloody diarrhea, abdominal cramps, nausea, and malaise; can begin 2 to 5 days after food is eaten, lasting about 8 days. Some, especially the very young, have developed hemolytic-uremic syndrome (HUS) that causes acute kidney failure. A similar illness, thrombotic thrombocytopenic purpura (TTP), may occur in adults.

Listeria monocytogenes: Found in intestinal tracts of humans and animals, milk, soil, leaf vegetables; can grow slowly at refrigerator temperatures. *Transmission:* Ready-to-eat foods such as hot dogs, luncheon meats, cold cuts, fermented or dry sausage, and other deli-style meat and poultry, soft cheeses and unpasteurized milk. *Symptoms:* Fever, chills, headache, backache, sometimes upset stomach, abdominal pain and diarrhea; may take up to 3 weeks to become ill;

may later develop more serious illness in at-risk patients (pregnant women and newborns, older adults, and people with weakened immune systems).

Salmonella (over 2300 types): Found in intestinal tracts and feces of animals; Salmonella Enteritidis in eggs. *Transmission:* Raw or undercooked eggs, poultry, and meat; raw milk and dairy products; seafood, and food handlers. *Symptoms:* Stomach pain, diarrhea, nausea, chills, fever, and headache usually appear 8 to 72 hours after eating; may last 1 to 2 days.

Shigella (over 30 types): Found in the human intestinal tract; rarely found in other animals. *Transmission:* Person-to-person by fecal-oral route; fecal contamination of food and water. Most outbreaks result from food, especially salads, prepared and handled by workers using poor personal hygiene. *Symptoms:* Disease referred to as "shigellosis" or bacillary dysentery. Diarrhea containing blood and mucus, fever, abdominal cramps, chills, and vomiting; 12 to 50 hours from ingestion of bacteria; can last a few days to 2 weeks.

Staphylococcus aureus: Found on human skin, infected cuts, pimples, noses, and throats). *Transmission:* Person-to-person through food from improper food handling. Multiply rapidly at room temperature to produce a toxin that causes illness. *Symptoms:* Severe nausea, abdominal cramps, vomiting, and diarrhea occur 1 to 6 hours after eating; recovery within 2 to 3 days — longer if severe dehydration occurs.

For additional information, please contact:

Connecticut Department of Public Health Food Protection Program (860) 509 – 7297

Connecticut Department of Consumer Protection Food and Standards Division (860) 713 – 6160

USDA Meat and Poultry Hotline 1-800-535-4555

US FDA Food Safety Information Service 1-888-SAFEFOOD